

REMARKS

Claims 1-9 and 11-30 are pending. Claim 10 has been canceled. Claims 1, 5, 11, 12, 16, 17, 23, 26, and 27 have been amended. No new matter has been introduced. Reexamination and reconsideration of the present application is respectfully requested.

In the November 30 Office Action, the Examiner rejected claims 1, 3-5, 8, and 10-11 under 35 U.S.C. 102 (e) as being anticipated by Alley et al., U.S. Patent No. 6,487,264 (hereinafter Alley). The Examiner rejected claims 2, 12-13, 16-19, and 21-22 under 35 U.S.C. § 103(a) as being unpatentable over Alley in view of Khanna, U.S. Patent No. 5,978,849 (hereinafter Khanna). The Examiner rejected claims 6-7 and 14-15 under 35 U.S.C. § 103 (a) as being unpatentable over Alley in view of Mantha et al., U.S. Patent Application Publication No. 20030126551 (hereinafter Mantha). The Examiner rejected claims 9 and 20 under 35 U.S.C. § 103 (a) as being unpatentable over Alley in view of Marko et al., U.S. Patent No. 6,876,835 (hereinafter Marko). The Examiner rejected claims 23-24, and 29-30 under 35 U.S.C. § 103 (a) as being unpatentable over Alley in view of Minami et al., U.S. Patent No. 6,034,963 (hereinafter Minami). The Examiner rejected claim 25 under 35 U.S.C. § 103 (a) as being unpatentable over Alley in view of Minami and further in view of Forin, U.S. Patent No. 6,594,701 (hereinafter Forin). The Examiner rejected claim 26 under 35 U.S.C. § 103 (a) as being unpatentable over Alley in view of Minami and Forin and further in view of Todd, U.S. Patent No. 6,714,516 (hereinafter Todd). The Examiner rejected claims 27 and 28 under 35 U.S.C. § 103 (a) as being unpatentable over Alley in view of Minami, Forin and Todd and further in view of Marko. Applicants respectfully traverse the rejections in view of the claims, as amended.

Independent claim 1, as amended now recites:

A system to manage energy usage of a processor, comprising:
a data communication network;
a transmitter, coupled to the data communication network, to invoke a protocol state machine to send a packet, to wait for an acknowledgment of receipt, and to prepare for a periodic transmission of additional packets;
a receiver, in communication with the transmitter coupled to the data communication network, to receive, process, and verify the packet and send an acknowledgment of receipt;
a buffer, coupled to the protocol state machine, to store the packet; and
a timer, in communication with the transmitter and the receiver, to cause a periodic pattern of packet transmission and reception, wherein the processor is adapted for use in an energy conscious device ***and the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.***

The Alley reference does not disclose, teach or suggest the system specified in independent claim 1, as amended. Unlike the system specified in claim 1, as amended, Alley does not teach a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”***

Instead Alley is directed to an RF modem apparatus for transmitting and receiving data which is operable in a power saving idle mode. The RF modem utilizes a supernegative circuit for transmission and reception of information encoded in a binary format and transmitted by Manchester encoded On/Off keying. (Alley; Col. 1, lines 38-53) The RF modem includes digital logic circuit for power reduction and controlling the modes of operation. Processor 26 is used to select a mode of operation, such as a full power active, "awake" mode and an idle, power saving mode. Processor 26 writes a command to a register in the wakeup logic 110 to put the digital logic circuit 25 into either a power saving sleep mode (minimum power usage) or a power saving scanning mode (slightly higher power usage). (Alley; Col. 7, lines 15-25) However, this is not the same as a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully

submit that claim 1, as amended distinguishes over the Alley reference.

Claims 12, 17, and 23, all as amended, recite limitations similar to those in independent claim 1, as amended. Accordingly, Applicants respectfully submit that claims 12, 17, and 23 distinguish over Alley for reasons similar to those set forth above with respect to independent claim 1, as amended.

Claims 2-9 and 11 depend from independent claim 1, as amended. Claims 13-16 depend from independent claim 12, as amended. Claims 18-22 depend from independent claim 17, as amended. Claims 24-30 depend from independent claim 23, as amended. Accordingly, Applicants respectfully submit that claims 2-9, 11, 13-16, 18-22, and 24-30 distinguish over Alley for the same reasons set forth above with respect to independent claims 1, 12, 17, and 23, as amended.

With respect to claims 2, 12-13, 16-19, and 21-22, the Khanna reference does not make up for the deficiencies of Alley. Khanna is directed to a system and method for establishing TCP connections. Khanna discloses a client-server environment including the Internet and an intranet. However, the combination of Alley and Khanna does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully submit that claims 2, 12-13, 16-19, and 21-22 distinguish over Alley in combination with Khanna.

With respect to claims 6-7 and 14-15, the Mantha reference does not make up for the deficiencies of Alley. Mantha discloses a data communication method in which a transmitter sends out a frame and waits in an idle state until it receives an acknowledge signal ACK. (Mantha; paragraph 110) However, the combination of Alley and Mantha does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the***

processor based on utilized capacity of the buffer.” Accordingly, Applicants respectfully submit that claims 6-7 and 14-15 distinguish over Alley in combination with Mantha.

With respect to claims 9 and 20, the Marko reference does not make up for the deficiencies of Alley. Marko discloses a receiver for an on demand broadcast system in which the receiver is programmed with a wake-up feature when a buffer is substantially full. (*Marko; Col. 8, lines 31-40*) However, the combination of Alley and Marko does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully submit that claims 6-7 and 14-15 distinguish over Alley in combination with Marko.

With respect to claims 23-28 and 29-30, the Minami reference does not make up for the deficiencies of Alley. Minami is directed to a multiple network protocol encoder/decoder. Minami discloses a Network protocol layer 101 that decodes incoming and encodes outgoing network packets and includes a plurality of state machines which represent different network protocol stacks. (*Minami; Col 3, lines 42-58*) However, the combination of Alley and Minami does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully submit that claims 23-28 and 29-30 distinguish over Alley in combination with Minami.

With respect to claims 25-28, the Forin reference does not make up for the deficiencies of Alley and Minami. Forin discloses a data communication system which utilizes a plurality of application buffers. However, the combination of Alley, Minami, and Forin does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully

submit that claims 25-28 distinguish over Alley in combination with Minami and Forin.

With respect to claims 26-28, the Todd reference does not make up for the deficiencies of Alley, Minami, and Forin. Todd discloses a receiver with a congestion control mechanism which restricts message transmission when the number of available buffers reaches a predetermined threshold value. (*Todd; Abstract*) However, the combination of Alley, Minami, Forin and Todd does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully submit that claims 26-28 distinguish over Alley in combination with Minami, Forin, and Todd.

With respect to claims 27 and 28, the Marko reference does not make up for the deficiencies of Alley, Minami, Forin, and Todd. Marko discloses a receiver for an on demand broadcast system in which the receiver is programmed with a wake-up feature when a buffer is substantially full. (*Marko; Col. 8, lines 31-40*) However, the combination of Alley, Minami, Forin, Todd, and Marko does not disclose, teach, or suggest a system wherein ***“the protocol state machine manages the power level of the processor based on utilized capacity of the buffer.”*** Accordingly, Applicants respectfully submit that claims 27 and 28 distinguish over Alley in combination with Minami, Forin, Todd, and Marko.

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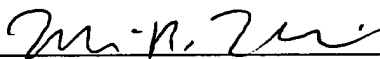
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Applicants believe that the claims are in condition for allowance. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference call would advance prosecution of the application.

Respectfully submitted,

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